

**UNREVIEWED SAFETY ISSUE
DETERMINATION AND SCREENING
WORKSHEET**

ONE CHANGE PER FORM

Unreviewed Safety Issue Determination (USID) Evaluation Number (obtain from TA-53 Facility Management Office):

Facility Identification:

Subject Document Title:

INTRODUCTION

DOE 5480.25 requires that activities not be performed that involve an Unreviewed Safety Issue (USI). A USI may result from changes to the accelerator facility, changes to the Safety Assessment Document or procedures described in the safety analysis, tests or experiments not described in the safety analysis, or the discovery of an inadequate safety analysis. This worksheet is one method of arriving at an Unreviewed Safety Issue determination (USID). As part of the screening and USID process, the following issues should be reviewed and discussed in the USID and screening worksheet.

1. Description of the aspects of the change.
2. Identification of parameters and systems affected by the issue.
3. Identification of the credible failure modes associated with the issue.
4. References to location of information used for the safety evaluation.

IMPACT ON THE ACCIDENTS EVALUATED AS THE DESIGN BASIS

1. Identify the design basis accidents reviewed for potential impact by the change.
2. Discuss how the parameters and systems affected by the change impact the consequences of these accidents.
3. Identify the design basis accidents, if any, for which failures modes associated with the change can be an initiating event.
4. Discuss the impact of the change on the probability of occurrence of the design basis accidents identified in No. 3 above.
5. Identify the safety systems and equipment important to safety affected by the change.
6. Discuss the impact of the change and/or the failure modes associated with the change on the probability of failure of the systems identified.
7. Discuss the impact of the change on the performance of the safety systems.

1. Detailed description of the change or inadequate safety analysis.
(Use engineering drawings if necessary.)

(Use continuation sheets as necessary.)

2. List documents and analyses that constitute the current authorization basis for the facility/process.
(Use engineering drawings if necessary.)

(Use continuation sheets as necessary.)

3. Changes to the Safety Envelope

Even if the answer is negative, explain your basis for answers in all applicable sections. Does the situation being reviewed require a change to the Safety Envelope?

☐ Yes ☐ No

If you answered Yes, a modification of the SAD and notification/approval from DOE are required. Contact ESH-3, RMP. Basis for your answer (document Safety Envelope sections reviewed):

(Use continuation sheets as necessary.)

4. USI Screening

Does this issue involve a potentially inadequate safety analysis? ☐ Yes ☐ No

IF YES, then screening is not applicable. Go to Section 5 and answer all six questions.

For the situation being reviewed (see para. 7.1 of 53FMS 114-02):

- | | | | | |
|---|--------------------------|-----|--------------------------|----|
| 1) a change to the facility as described in the safety analyses? | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 2) a change to the procedures as described in the safety analyses? | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 3) a test or experiment not described in the safety analyses? | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |
| 4) a change to the Safety Assessment Document (other than editorial)? | <input type="checkbox"/> | Yes | <input type="checkbox"/> | No |

Basis for answers (document references reviewed):

(Use continuation sheets as necessary.)

If the answer to any question in Section 4 is Yes, then a USID is required prior to implementation.

If the answer to every question in Section 4 is No, then a USID safety evaluation is not required, and you may go to Section 6 and secure the sign-off signatures.

5. USID Determination

For the situation being reviewed, answer each of the following seven questions.

5. 1 Could the proposed activity increase the probability (through reduction in the margin of safety or otherwise) of an accident previously evaluated in the Safety Analyses?

☐ Yes ☐ No

Basis for your answer:

(Use continuation sheets as necessary.)

5.2 Could the proposed activity increase the consequences of an accident previously evaluated in the safety analysis?

☐ Yes ☐ No

Basis for your answer:

(Use continuation sheets as necessary.)

5.3 Could the proposed activity increase the probability (through reduction in the margin of safety or otherwise) of a malfunction of equipment important to safety previously evaluated in the safety analyses?

☐ Yes ☐ No

Basis for your answer:

(Use continuation sheets as necessary)

5.4 Could the proposed activity increase the consequences of a malfunction of equipment important to safety previously evaluated in the safety analyses?

☐ Yes ☐ No

Basis for your answer:

(Use continuation sheets as necessary)

5.5 Could the proposed activity create the possibility of a different type of accident from any previously evaluated in the safety analyses which could result in significant safety consequences?

☐ Yes ☐ No

Basis for your answer:

(Use continuation sheets as necessary)

5.6 Could the proposed activity create the possibility of a different type of malfunction of equipment important to safety from any previously evaluated in the safety analyses which could result in significant safety consequences?

☐ Yes ☐ No

Basis for answer:

(Use continuation sheet as necessary.)

If any of the above questions is answered “YES,” the proposed change involves an unreviewed safety issue.

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| 6. Based on the evaluation presented above, the change
[] does <u>not</u> constitute an unreviewed safety issue
[] does constitute an unreviewed safety issue. (DOE approval required prior to implementation. Contact ESH-3 RMP.) |
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SIGNATURES

Preparer's Signature	Date
Reviewer's Signature	Date
Reviewer's Signature	Date
Approval Signature	Date

Send original to AOT-FM, MS H814. AOT -FM will send a copy of any positive USID to ESH-3, RMP, MS K489.